

IN THE CLAIMS

The following is a listing of the claims in accordance with 37 C.F.R. §1.121.

1. (currently amended) A power system for supplying power to a load, the power system comprising:

a converter system comprising a first converter and a second converter; wherein the converter system is configured for operating in a first mode and a second mode; wherein the first converter and the second converter are configured to be coupled in series during the first mode, and in parallel when operating in the second ~~fault~~-mode; and

a transformer having a primary winding comprising a normal winding and a fault winding, and wherein the normal winding is coupled to the first converter and the second converter during the first mode, and wherein the normal winding and the fault winding are coupled to the first converter and the second converter during the second-fault-mode; and

a sensing circuit coupled to the transformer and configured to sense an electrical parameter of the transformer; wherein the electrical parameter comprises a voltage across the fault winding of the transformer or a current across a secondary winding of the transformer.

2. (canceled)

3. (previously presented) The system of claim 2, further comprising a switching circuit coupled to the transformer and configured to couple the fault winding to the converter system.

3. (canceled)

5. (original) The system of claim 4, further comprising control circuitry coupled to the sensing circuit and the switching circuit, and configured to change a state of the switching circuit based on the sensed electrical parameter.

6.-7. (canceled)

8. (original) The system of claim 5, wherein the converter system further comprises a third converter coupled to fault winding and configured for canceling harmonic currents at an output of the transformer.

9. (previously presented) The system of claim 1, wherein the primary winding is wound in a zigzag pattern.

10. (original) The system of claim 1, wherein the first converter and the second converter each comprise a rating of approximately half of a nominal power rating of the power system.

11. (canceled)

12. (currently amended) A power system for supplying power to a load, the power system comprising:

a generator configured to generate a variable frequency output power;

a converter system comprising a first converter and a second converter; wherein the converter system is configured for operating in a normal mode and a fault mode; wherein the first converter and the second converter are configured to be coupled in series during the normal mode, and in parallel during the fault mode;

a transformer having a primary winding comprising a normal winding and a fault winding, and wherein the normal winding is coupled to the first converter and the second

converter during the normal mode, and wherein the normal winding and the fault winding are coupled to the first converter and the second converter during the fault mode;

a switching circuit coupled to the transformer and configured to couple the fault winding to the converter system;

a sensing circuit coupled to the switching circuit and configured to sense an electrical parameter of the transformer; wherein the electrical parameter comprises a voltage across the fault winding of the transformer or a current across a secondary winding of the transformer ;and

control circuitry coupled to the sensing circuit and the switching circuit, and configured to change a state of the switching circuit based on the sensed electrical parameter.

13. (original) The system of claim 12, wherein the converter system further comprises a third converter coupled to fault winding and configured for canceling harmonic currents in the output of the transformer.

14. (original) The system of claim 13, wherein the third converter is coupled to the generator and is further configured for providing a torque for controlled motion of a prime mover in a wind turbine.

15. (previously presented) The system of claim 13, wherein the third converter is coupled to the generator is further configured for providing a power for a controlled start-up of a gas turbine.

16.-17. (canceled)

18. (original) The system of claim 12, wherein the primary winding is wound in a zigzag pattern.

19. (currently amended) A method for supplying power to a load, the method comprising:

sensing an electrical parameter; wherein the electrical parameter comprises a voltage or a current across a transformer;

coupling a first converter and a second converter in series during a ~~normal~~ first mode and in parallel during a second mode in response to the sensed electrical parameter; and

coupling a normal winding of a transformer to the first converter and the second converter during the first mode, and the normal winding and a fault winding to the first converter and the second converter during the second mode.

20. (canceled)

21. (previously presented) The method of claim 19, further comprising canceling harmonic currents in the output of the transformer.

22. (original) The method of claim 21, further comprising providing a torque for controlled motion of a prime mover in a wind turbine.

23.-31. (canceled)